CLAIMS:

1. An electroluminescent device comprising a host material and a rubrene derivative having a naphthacene nucleus comprising four fused phenyl rings a, b, c, and d, in order, containing two secondary phenyl ring groups linked to the "c" ring, each bearing directly or indirectly a fluoro or perfluoroalkyl group, wherein each fluoro or perfluoroalkyl group is either:

a) linked directly to one of said secondary phenyl rings and is located on a meta or ortho position, orb) located in any position of another aryl group linked directly or indirectly to one of the secondary phenyl rings.

2. The device of claim 1 wherein the perfluoroalkyl group is a trifluoromethyl group.

3. The device of claim 1 wherein the secondary phenyl ring on the "c" ring bears a fluoro or perfluoromethyl group on a meta- or ortho-position of that ring.

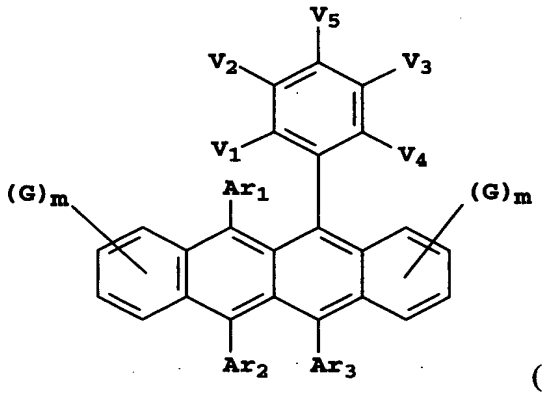
4. The device of claim 1 wherein the each secondary phenyl ring on the "c" ring bears a fluoro or trifluoromethyl group on a meta- or ortho-position.

5. The device of claim 1 wherein at least one secondary phenyl ring on the "c" ring bears a meta- or ortho-fluoro substituent.

6. The device of claim 1 at least one secondary phenyl ring on the "c" ring is linked to an aryl group that is substituted with a fluoro or perfluoroalkyl group.

7. The device of claim 6 wherein the aryl group is a phenyl group that bears a meta- or para-fluoro substituent.

8. The device of claim 1, wherein the rubrene derivative is represented by Formula (1),



(1)

wherein:

Ar_1, Ar_2, and Ar_3 represent independently selected aryl groups;

each G represents an independently selected substituent;

each m is independently 0-4;

$V^1 - V^5$ represent hydrogen or independently selected substituent groups, provided there are in total two fluoro or perfluoroalkyl groups linked directly or indirectly to the "c" ring,selected from those where:

a) at least one of $V^1 - V^4$ represents a fluoro or perfluoroalkyl group,

or

at least one of $V^1 - V^5$ and Ar_3 includes an aryl ring bearing a fluoro or trifluoromethyl group.

9. The device of claim 8, wherein V^3 represents a fluoro substituent.

10. The device of claim 9, wherein at least one of V^2, V^3 or V^5 includes a phenyl ring bearing a fluoro or perfluoroalkyl group.

11. The device of claim 9 wherein the substituents are selected to provide an emitted light having an orange-red hue.

12. The device of claim 9 wherein the substituents are selected to provide an emitted light having a wavelength of maximum emission (λ_{max}) in ethyl acetate solution such that

$$520nm \leq \lambda_{max} \leq 650nm.$$

13. The device of claim 9 wherein the substituents are selected to provide a reduced loss of initial luminance compared to the device containing no rubrene derrivative.

14. The device of claim 1 wherein:

either

a) the sublimation temperature of said derivative is lower by at least $5^{\circ}C$ than the derivative without the fluoro or perfluoroalkyl groups;

or

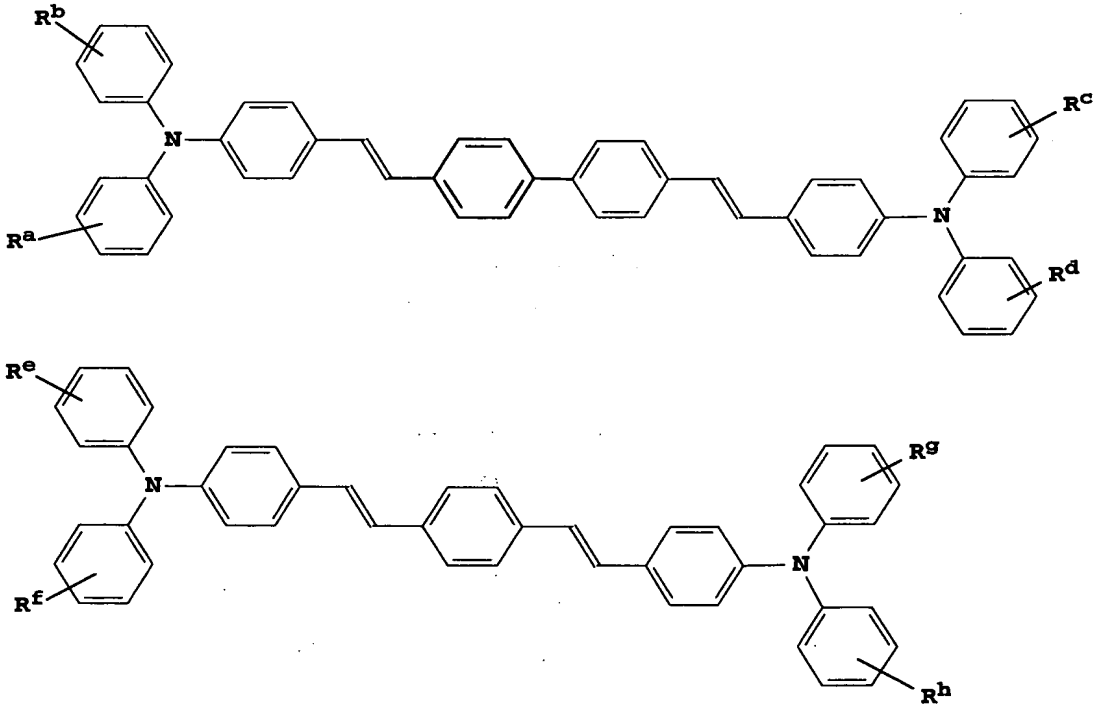
b) the derivative sublimes and the derivative without the fluoro or perfluoroalkyl groups melts.

15. A device of claim 1 wherein the derivative has a sublimation temperature of at least $10^{\circ}C$ lower than that of the rubrene without fluorine or fluorine containing groups.

16. The device of claim 1, further comprising a blue or blue-green light-emitting compound to provide a white light emission.

17. The device of claim 16 wherein the blue or blue-green light-emitting material comprises a perylene group.

18. The device of claim 16 wherein the blue or blue-green light-emitting material comprises a material of one of the following structures:



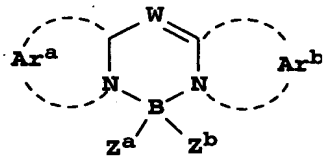
wherein:

R^a – R^h independently represent hydrogen or one or more an independently selected substituents.

19. The device of claim 18 wherein the blue or blue-green light-emitting material comprises 1,4-bis[2-[4-[*N*,*N*-di(*p*-tolyl)amino]phenyl]vinyl]benzene (BDTAPVB) or 1,4-bis[2-[4-[*N*,*N*-di(*p*-tolyl)amino]phenyl]vinyl]biphenyl.

20. The device of claim 16, wherein, the blue or blue-green light-emitting compound comprises a boron complex.

21. The device of claim 20 wherein the blue or blue-green light-emitting material comprises a compound represented the following structure:



wherein:

Ar^a and Ar^b independently represent the atoms necessary to form an aromatic ring group;

w represents N or C-Y, wherein Y represents hydrogen or a substituent; and

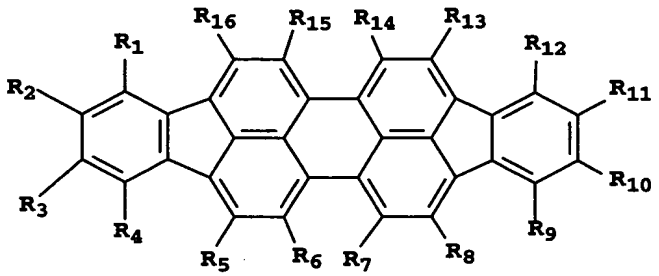
Z^a and Z^b represent independently selected substituents.

22. The device of claim 21 wherein w represents N.

23. The device of claim 1, further comprising a red light-emitting compound to provide a white light emission.

24. The device of claim 23, wherein the derivative does not emit light.

25. The device of claim 24 wherein the red light-emitting compound comprises a diindenoperylene compound of the following structure:



wherein:

R_1-R_{16} are independently selected as hydrogen or a substituent.

26. The device of claim 25, wherein R_1, R_4, R_9, R_{12} represent independently selected phenyl groups, R_2, and R_3 as well as R_{10} and R_{11} form independently selected fused benzene ring groups.

27. The device of claim 1, wherein the host material is a hole-transporting material.

28. The device of claim 1, wherein the host material is a hole-transporting material comprising a tertiary amine.

29. The device of claim 1, wherein the host material is an electron-transporting material.

30. The device of claim 29, wherein the electron-transporting material comprises a metal complex of 8-hydroxyquinoline.

31. The device of claim 1 wherein the derivative is present in an amount of up to 10%-wt of the host material.

32. The device of claim 1 wherein the derivative is present in an amount of up to 0.1-5.0%-wt of the host material.

33. A display comprising the electroluminescent device of claim 1.

34. The device of claim 1 wherein white light is produced either directly or by using filters.

35. An area lighting device comprising the electroluminescent device of claim 1.

36. A process for emitting light comprising applying a potential across the device of claim 1.